



Australian
Competition &
Consumer
Commission

Review of the declaration of the Domestic Mobile Terminating Access Service

Discussion Paper

May 2013



© Commonwealth of Australia 2013

This work is copyright. Apart from any use permitted by the *Copyright Act 1968*, no part may be reproduced without permission of the Australian Competition and Consumer Commission. Requests and inquiries concerning reproduction and rights should be addressed to the Director Publishing, Australian Competition and Consumer Commission, GPO Box 3131, Canberra ACT 2601.

Table of Contents

List of abbreviations and acronyms	4
1 Introduction.....	5
1.1 Consultation Process	5
1.2 What is the MTAS?.....	6
1.3 Why does the ACCC regulate the MTAS?	7
1.4 The ACCC approach to MTAS declaration	8
2 The mobile services market in 2013	11
2.1 More mobile services than fixed line services	11
2.2 Mobile data services and over the top services have grown	12
2.3 Mobile network operators have changed	14
2.4 Retail pricing – per minute call rates only part of the picture.....	15
2.5 Network infrastructure changes	16
3 The MTAS Declaration Inquiry in 2009.....	18
3.1 Promoting competition.....	18
3.2 Achieving any-to-any connectivity	20
3.3 Economically efficient use of, and investment in, infrastructure.....	21
4 Issues for the MTAS declaration in 2013	22
4.1 Should mobile voice termination continue to be declared?	22
4.2 Should SMS be declared?	24
4.3 Should services on LTE networks be declared?.....	26
4.4 How does the National Broadband Network affect the MTAS?.....	27
4.5 How long should an MTAS declaration apply?	28
Appendix A – Consolidated list of questions	29
Appendix B – MTAS Service Description	31
Appendix C – Legislative framework and the ACCC’s approach to the LTIE	32

List of abbreviations and acronyms

ACCC	Australian Competition and Consumer Commission
AMPS	advanced mobile phone system
CDMA	code division multiple access
FAD	final access determination
FTM	fixed to mobile
GSM	global system for mobiles
IP	internet protocol
LTE	long term evolution
LTIE	long term interests of end-users
MMS	multimedia messaging service
MNO	mobile network operator
MTAS	mobile terminating access service
MTM	mobile to mobile
SIOs	services in operation
SMS	short message service
The Act	the <i>Competition and Consumer Act 2010</i>
VoIP	voice over internet protocol

1 Introduction

This document begins the Australian Competition and Consumer Commission's (ACCC) public inquiry into the declared domestic mobile terminating access service (MTAS).¹

The MTAS declaration inquiry will examine whether the MTAS declaration should be extended, varied, revoked, allowed to expire or a new declaration made. The MTAS declaration is scheduled to expire on 30 June 2014.

The MTAS declaration inquiry is also relevant to the separate MTAS access determination inquiry which will examine whether to extend, vary, or revoke the MTAS Final Access Determination (FAD).² The MTAS FAD sets out the regulated price of the MTAS and the non-price terms of access to the MTAS and is also due to expire on 30 June 2014.

1.1 Consultation Process

This paper looks at the key issues the ACCC considers relevant to the MTAS declaration and invites submissions on these issues, as well as any other issues that you may consider relevant. A number of questions are asked in each chapter of this paper and a consolidated list of questions for submissions is provided at Appendix A. You may wish to address any or all of these questions and any other matter relevant to mobile terminating services.

Submissions will be accepted until **5 July 2013**. Submissions received after this time may not be considered.

All submissions will be considered public and posted on the ACCC website. If you wish to provide commercial-in-confidence material to the ACCC, a public version should also be provided. The public version should clearly identify the commercial-in-confidence material by replacing the confidential material with '[c-i-c]'.

The ACCC and AER general policy on the collection, use and disclosure of information is set out in the *ACCC-AER information policy: the collection, use and disclosure of information guide*. A copy of the guide is available on the ACCC website.

The ACCC prefers to receive electronic copies of submissions in either Adobe PDF or Microsoft Word format that is text searchable. Please send submissions to the following email address: MTASDeclarationinquiry@acc.gov.au.

¹ See section 498 of the *Telecommunications Act 1997*.

² See subsection 152BCI(3) of the *Competition and Consumer Act 2010*.

After considering the submissions it receives, the ACCC expects to issue a draft decision for public consultation later in 2013 and a final decision in the first half of 2014.³ The ACCC will likely commence the public inquiry on whether to make an FAD relating to the MTAS FAD in 2013, running concurrently with the declaration inquiry. If the ACCC decides to re-declare the MTAS, the ACCC will then finalise the MTAS FAD in early 2014 after the completion of the declaration inquiry.

1.2 What is the MTAS?

The MTAS is a wholesale service provided by a mobile network operator (MNO) to fixed line operators and other MNOs to connect – or ‘terminate’ – a call on its mobile network. It enables calls to be made to consumers on mobile phone networks. Every phone call involves an ‘origination’ from the network making the call and a ‘termination’ onto the network receiving the call.

If a caller on a fixed line wants to call a person on a mobile phone, the fixed line service provider needs the MTAS from the mobile phone user’s MNO in order to complete the call. Similarly, for a mobile phone user on one network to call a mobile phone user on another network, the MNO of the person making the call needs the MTAS from the MNO of the person receiving the call.

The network owner that originates the call will generally purchase terminating access from the network owner that completes the call. The originating network owner will recover these costs, and the costs it incurs from originating the call, through the retail price it charges its customers for providing the call. This commercial arrangement is known as the ‘calling party pays’ model or the ‘termination’ model.

Consumers on all networks generally make mobile voice calls of 2-3 minutes duration. This means that providers have roughly the same level of voice traffic (not data consumption) as a proportion of their subscribers.

The MTAS regulated by the ACCC is identified in its service description. The current MTAS service description limits the MTAS to voice calls and does not extend to SMS or data services. The current MTAS service description is reproduced below, and at **Appendix B**.

“The **Domestic Mobile Terminating Access Service** is an access service for the carriage of voice calls from a point of interconnection, or potential point of interconnection, to a B-Party directly connected to the access provider’s digital mobile network.

Definitions

³ Paragraph 152ALA(7)(c) requires that the ACCC publish its final decision in the period between 1 January 2014 and 30 June 2014.

Where words or phrases used in this declaration are defined in the *Trade Practices Act 1974* or the *Telecommunications Act 1997* or the *Telecommunications Numbering Plan 1997*, they have the meaning given in the relevant Act or instrument.

Other definitions:

B-Party is the end-user to whom a telephone call is made.

Digital mobile network is a *telecommunications network* that is used to provide *digital mobile telephony services*.

Point of interconnection is a location which:

- (a) is a physical point of demarcation between the access seeker's network and the access provider's digital mobile network, and
- (b) is associated with (but not necessarily co-located with) one or more gateway exchanges of the access seeker's network and the access provider's digital mobile network."

The ACCC notes that, if declaration of an MTAS is to continue, the service description will at least need to be varied to reflect legislative changes since the previous declaration. In particular, the MTAS declaration will need to be amended to replace the reference to the *Trade Practices Act 1974* with a reference to the *Competition and Consumer Act 2010* (the Act). The ACCC proposes to make this change in this inquiry.

1.3 Why does the ACCC regulate the MTAS?

The mobile sector is generally perceived to be competitive, with each operator actively competing to gain customers. This may raise the question of why regulate mobile terminating services at all.

Every MNO has control over connecting calls to its own customers. In effect, they have monopoly power over access to end-users on their network. This means an MNO could restrict access to its own customers by imposing unreasonable terms or very high prices to terminate calls on its network. This would limit the services available to consumers. As noted above, under the caller pays principle, the person who pays for a call to be made to a person connected to a particular mobile carrier does not choose that mobile carrier. This means in effect, that a mobile network has a degree of monopoly power over the price that it charges any party who wishes to call customers connected to that network.

As a result, the ACCC views the MTAS as a bottleneck to any-to-any connectivity for mobile network end-users and regulates the MTAS to ensure termination rates are not a barrier to competition and consumers on different networks can call each other.

The ACCC first regulated an MTAS in 1997 by deeming it to be a declared service. As a declared service, an MNO must provide the MTAS to another party if requested to do so and must take reasonable steps to ensure it provides the MTAS at a technical and operational quality equivalent to that which it provides itself. It must also take reasonable steps to ensure it provides fault detection, handling and repair for the MTAS at a technical and operational quality and timing equivalent to that which it provides itself.⁴

In 1997, the mobile networks in operation were the analogue advanced mobile phone system (AMPS) network and the digital global system for mobiles (GSM) network. The ACCC deemed declared an MTAS for both the AMPS and the GSM networks. The ACCC explained that these services should be deemed declared in order for end-users on AMPS and GSM networks to achieve any-to-any connectivity with end-users on any other network.

In 2002, the ACCC varied the MTAS declaration to include voice termination on code division multiple access (CDMA) mobile networks. In 2004, a new MTAS declaration was made to include voice termination on 3G mobile networks. In 2002 and 2004, the ACCC concluded that the MTAS should be regulated as it was a bottleneck to the MNO's end-users, regardless of the underlying mobile network technology. One of the issues in this inquiry is the impact of the introduction of Long Term Evolution technology (also referred to as 4G in Australia) on the MTAS declaration.

The ACCC held its most recent MTAS declaration inquiry in 2009 (2009 Declaration Inquiry), when it extended the 2004 MTAS declaration for five years until June 2014. This current inquiry will consider whether to further extend, vary, revoke or let the current MTAS declaration expire, or whether to make a new MTAS declaration.

1.4 The ACCC approach to MTAS declaration

Under the Act, the ACCC may declare a service if it is satisfied that declaring the service would promote the long term interests of end-users (LTIE).⁵ At its simplest, the ACCC considers that the LTIE are promoted if regulating the service would contribute to lower prices for goods and services, higher quality goods and services, and or a greater diversity of goods and services.⁶

In this inquiry, the ACCC is reviewing the existing MTAS declaration. In this context, the ACCC must have regard to the extent to which maintaining, varying or revoking the existing declaration is likely to achieve the following objectives:

- promoting competition in markets for listed services (telecommunications services);

⁴ Subsection 152AR(3) of the Act.

⁵ Subsection 152AL(3) of the Act.

⁶ ACCC, *Telecommunications services – declaration provisions: a guide to the declaration provisions of Pt XIC of the Trade Practices Act*, 31 July 1999.

- achieving any-to-any connectivity in relation to carriage services that involve communication between end-users; and
- encouraging the economically efficient use of, and the economically efficient investment in, the infrastructure by which telecommunications services are supplied.⁷

These objectives are interrelated. In many cases, the LTIE may be promoted through the achievement of all of these criteria. In other cases, there may be a balance between them.

With regard to promoting competition, the ACCC will look at whether declaration will remove obstacles to end-users gaining access to services. The ACCC will also identify the market(s) for the MTAS and any services that are substitutable for the MTAS, as well as the market for any downstream services, such as retail mobile services and calls from fixed networks to mobile networks. Then, the ACCC will assess the likely effect on competition in the market(s) if the declaration is maintained, varied or revoked. The ACCC has also traditionally considered the state of competition in the market(s) if the service was declared and if it was not declared.

With regard to any-to-any connectivity, declaration should ensure that the regulated service enables each end-user to communicate with each other end-user, whether or not they are on the same network. This was the justification for the initial deemed declaration of the MTAS in 1997.

Encouraging the economically efficient use of and investment in infrastructure is more complex. Economic efficiency has three aspects: productive efficiency, allocative efficiency and dynamic efficiency.⁸ The ACCC must also consider the technical feasibility of the service, the legitimate commercial interests of service providers and the incentives and risks involved in investing in the necessary infrastructure.⁹ In essence, the ACCC will consider whether service providers are able to recover the costs of providing the service.

The ACCC will have regard to these issues as it considers submissions in the course of the MTAS declaration inquiry. Where existing market conditions indicate the MTAS is competitively provided, or is likely to be competitively provided, regulated access may no longer be necessary. Regulation of services will generally only be necessary if it leads to benefits in terms of lower prices, better services, or improved service quality for end-users, and this outweighs the costs of regulation.

⁷ Subsection 152AB(2) of the Act.

⁸ Productive efficiency refers to the efficient use of resources within each firm to produce goods and services using the least cost combination of inputs. Allocative efficiency is the efficient allocation of resources across the economy to produce goods and services that are most valued by consumers. It also refers to the distribution of production costs amongst firms within an industry to minimise industry-wide costs. Dynamic efficiency refers to efficiencies flowing from innovation leading to the development of new services, or improvements in production techniques. It also refers to the efficient deployment of resources between present and future uses, such that the welfare of society is maximised over time.

⁹ Subsection 152AB(6) of the Act.

More information on the legislative framework and the ACCC's approach to assessing the LTIE is in section 3 which discusses the 2009 MTAS declaration inquiry and in **Appendix C**.

2 The mobile services market in 2013

The mobile services market in 2013 is very different to the market in 2004 when the current MTAS declaration was made, and different to the market in 2009 when it was extended for five years. The following section looks at some of the key features of the mobile services market in 2013 that the ACCC considers are relevant in the current inquiry.

2.1 More mobile services than fixed line services

In 2012, there were twice as many mobile phones than fixed line phones, and currently more calls are made on mobile phones than on fixed line phones.

Between June 2008 and June 2011, the number of mobile subscribers grew by around 11 per cent from 22.1 million¹⁰ to 24.5 million.¹¹ In the 2011-12 financial year, the number of mobile subscribers declined for the first time, from 24.5 million to 24.3 million. Following a sustained period of high growth, it appears that the market may be reaching saturation, as seen by the slight decline in 2011-12.

The use of mobile phones to make calls has also continued to grow. Since the last inquiry, the number of mobile voice call minutes has increased by about 47 per cent, from 28.2 billion minutes in the 2008-09 period, to 41.4 billion minutes in the 2011-12 period.¹² The growth in mobile calls does not appear to be slowing in the same way as the growth in mobile services in operation with the number of mobile voice call minutes increasing by 16 per cent in the 2011-12 financial year.¹³

At the same time, more Australians prefer the mobile phone to the fixed line telephone as their main communication service (48 per cent and 22 per cent respectively).¹⁴ The Australian Communications and Media Authority (ACMA) estimates that there were 3.1 million adults with a mobile phone and no fixed line phone in the 2011-12 period, an increase of 24 per cent on the year before.¹⁵ Furthermore, at June 2012, there were 10.4 million fixed voice services in operation, down 0.9 per cent from June 2011.¹⁶ Fixed voice call minutes have also fallen 54 per

¹⁰ ACCC, *Domestic Mobile Terminating Access Service – An ACCC Discussion Paper reviewing the declaration for the domestic mobile terminating access service*, December 2008, p. 12.

¹¹ ACCC, *ACCC telecommunications communications reports 2011-12*, p. 17.

¹² *ibid.*

¹³ *ibid.*

¹⁴ ACMA, *Communications report 2011-12*, December 2012, p. 6.

¹⁵ *ibid.*, p. 30.

¹⁶ ACCC, *ACCC telecommunications communications reports 2011-12*, p. 14.

cent since June 2008. In 2008, calls from fixed line phones totalled 68.1 billion minutes, but in June 2012 it had fallen to 31.2 billion minutes.¹⁷

These trends suggest a greater degree of fixed to mobile substitution for voice calls today than during previous MTAS declaration inquiries. Such a shift in consumer behaviour is relevant to the MTAS declaration inquiry as it may affect definitions of the relevant markets and the assessment of competition in these markets.

2.2 Mobile data services and over the top services have grown

The current MTAS declaration focuses on the termination of voice calls on a mobile network. There has been significant growth in the use of mobile data in recent times. The increasing use of mobile networks to provide data rather than voice services may have implications for whether declaration of the MTAS will continue to promote the efficient use of, and investment in infrastructure.

The number of mobile broadband services in operation since the 2009 Declaration Inquiry has increased rapidly.¹⁸ In June 2010, there were 10.26 million mobile broadband services in operation (SIOs).¹⁹ In June 2011 this had increased 77 per cent to 18.11 million mobile broadband SIOs, and in June 2012 to 22.05 million.²⁰

The volume of data transmitted on mobile networks has also increased greatly. Data downloaded on mobile handsets increased from 3,695 Tetra Bytes (TB) in June 2011 to 6,610 TB in June 2012, a 78.9 per cent increase.²¹ The volume of data downloaded by non-handset wireless broadband devices (such as tablets and devices connected via data cards or dongles) increased by 32 per cent between June 2011 and June 2012.²² This growth is predicted to continue, with it forecast that demand for mobile data will increase 30 fold between 2007 and 2015.²³

¹⁷ *ibid.*, p. 13.

¹⁸ In this section, mobile broadband refers to data services accessed on mobile handsets, as well as non-handset devices (for example wireless data services accessed with dongles, data cards and tablets).

¹⁹ This includes 6.8 million mobile handset data services and 3.46 million mobile broadband services using dongles, data cards and tablets. See, ACMA, *Communications Report 2009-10*, December 2010, p. 23. Accurate data for 2009 is not available as numbers for mobile handset data services were not collected at the time.

²⁰ ACMA, *Communications report 2011-12 series: Report 3 – Smartphones and tablets Take-up and use in Australia*, February 2013, p. 2.

²¹ Australian Bureau of Statistics, *8153.0 - Internet Activity, Australia, June 2012*, October 2012.

²² *ibid.*

²³ ACMA, *Towards 2020 – Future spectrum requirements for mobile broadband*, May 2011.

One of the key reasons for the growth of data consumption on mobile networks is the adoption of smartphones and tablets and their ability to access to the internet and other data services. The most recent data from the ACMA is that 49 per cent of the adult population had a smartphone in May 2012, up from 25 per cent in June 2011, with 8.7 million smartphone and 4.4 million tablet users.²⁴ Furthermore, around 6 million Australians used the internet on their mobile phone in June 2012, compared to only 3.9 million in June 2011. In 4.45 million smartphone users downloaded a mobile application in June 2012, nearly double the number in June 2011.²⁵

Another factor in data usage growth is that voice and messaging applications may serve as substitutes for traditional mobile voice and SMS services. Such applications provide users with an alternative to the voice and messaging services offered by their mobile services provider. Further, as consumers are charged for these applications out of their mobile data allowances, they may be cheaper for consumers to use than using traditional voice and messaging services.

The market for such services is in its early stages, even if growing rapidly. The use of mobile voice over internet protocol (VoIP) is increasing but is small compared to the use of traditional mobile voice services. The ACMA reports that the number of mobile VoIP users grew 133 per cent in 2011-12, to 616,000 users, out of approximately 24 million mobile subscribers.²⁶

A third reason for greater mobile data consumption relates to improved network quality. Upgrades to network technology have improved the quality of mobile broadband services by increasing data rates, improving coverage, network capacity and latency experienced on the network. For example, Telstra, Optus and Vodafone have all upgraded the technology used in the 3G networks, and have begun the rollout or testing of their 4G networks.²⁷ These developments have improved mobile broadband services and provided new, better quality services to consumers.

The growth in demand for data services is likely to have significant implications for providers, requiring considerable investment in networks to meet this demand. Mobile VoIP and over the top messaging applications may serve as substitutes for traditional mobile services, and this may have implications for the declaration inquiry.

However, while mobile data growth has been significant and led to demands on mobile networks not previously experienced, mobile VoIP applications remain a small share of overall mobile network services in operation. This suggests that the network investments of recent times are most attributable to the consumption of non-voice services on a mobile network.

²⁴ ACMA, *Communications report 2011-12 series: Report 3 – Smartphone and tablets Take up and use in Australia*, December 2012, p. 6.

²⁵ *ibid.*, p. 34.

²⁶ *ibid.*, pp. 1 and 36.

²⁷ More information on the operator's 4G networks is provided later in this paper.

In addition, the ACCC understands that, unlike voice termination, when data is sent between mobile networks, networks do not pay separate termination charges but pay each other to both send and receive each data transfer out of existing capacity reserved for data communications. Therefore, the bottleneck issues that arise for voice call termination do not arise for the provision of data services.

As indicated earlier, the MTAS declaration focuses on the termination of voice calls on a mobile network. However, the increasing use of mobile networks to provide data rather than voice services may have implications for whether declaration of the MTAS will continue to promote the efficient use of, and investment in, infrastructure. We welcome submissions on whether data should be included in the MTAS service description, how the increasing use of data services has affected the investment in infrastructure, and whether VoIP applications are effective substitutes for traditional mobile services.

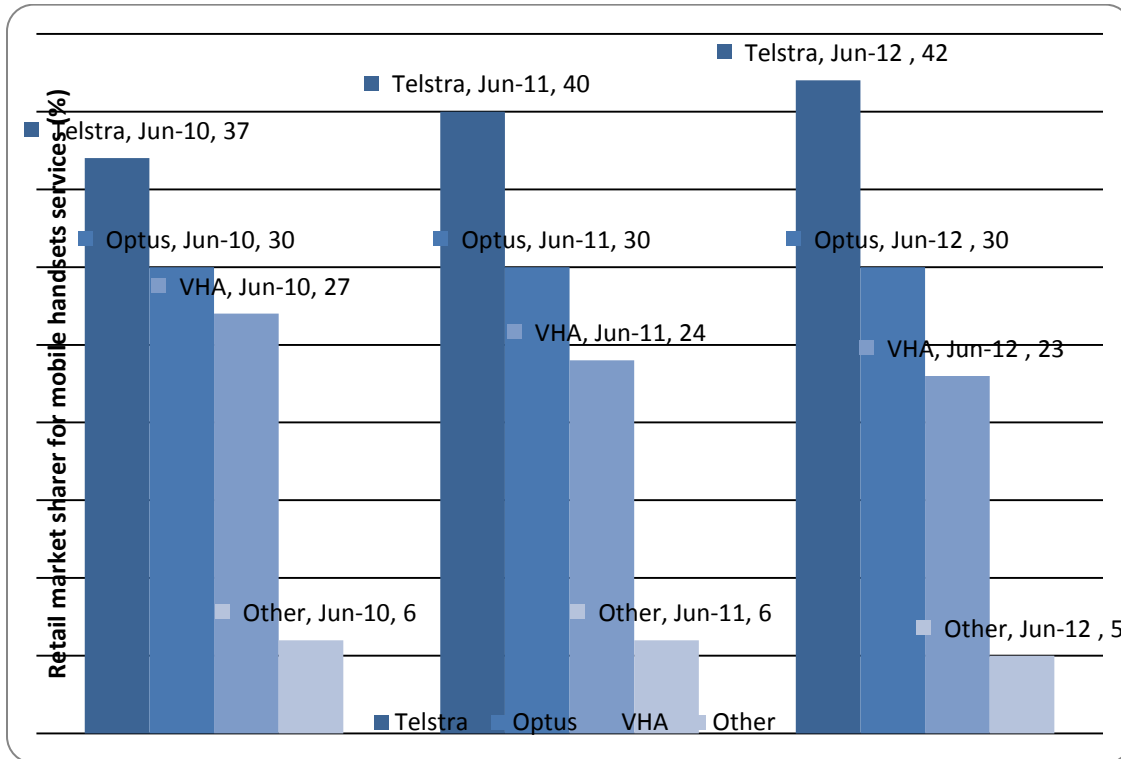
2.3 Mobile network operators have changed

Since the previous inquiry, there have been significant changes in the ownership and market shares of service providers who offer MTAS.

During the MTAS declaration inquiry in 2008-2009, there were four MNOs operating in Australia: Telstra, Optus, Vodafone and Hutchison. In June 2009, Vodafone and Hutchison merged to form Vodafone Hutchison Australia (VHA), leaving only three MNOs in Australia. As a result, the markets for the MTAS and mobile retail service are more concentrated today than during the previous inquiry. Together, Telstra, Optus and VHA account for 95 per cent of the mobile voice market.

Over the past three years, Telstra's market share has consistently increased, while VHA's has fallen, as can be seen in Figure 1 below. VHA's losses have largely been due to the ongoing effects of network issues it experienced in late 2010. These network problems meant that VHA customers experienced poor network coverage, call drop outs, and delayed SMS and voicemails. Telstra has captured many of the subscribers leaving VHA, partly because it has been able to differentiate its services in terms of network quality and coverage. Optus' position as the number two MNO, with a market share of around 30 per cent, has remained relatively stable since the 2009 declaration inquiry.

Figure 1: Retail market shares of major mobile carriers for mobile handset services from 2009–10 to 2011–12



Source: ACCC, *ACCC telecommunications communications reports 2011-12*, p. 18.

2.4 Retail pricing – per minute call rates only part of the picture

Overall, the prices of mobile voice services have continued to fall since the previous declaration inquiry. The average price for mobile voice services has fallen by 12.9 per cent since 2009. However, the decline in retail prices since 1997 has been levelling out over recent years, with a 1 per cent decrease in prices in the 2011-2012 period.²⁸ Many factors other than per minute call rates also affect the value of mobile retail services.

First, under most mobile retail plans, consumers are charged for establishing a call (or ‘flag fall’) in addition to the per minute charges for each call. Consumers may not always be aware that ‘flag fall’ charges are on top of the headline rates that apply to calls.

²⁸ See, *ACCC telecommunications communications reports 2011-12*, pp. 91-94.

Second, the structure of many mobile plans makes it difficult for consumers to compare services and make informed purchasing decisions. Most retail plans are ‘included value’ plans.

Consumers pay a dollar amount that can be used for an included amount of calls, SMS and megabytes (MB) of data. Other benefits may be included, such as free calls to people on the same network at specified times of the day or unlimited SMS. The variety of benefits makes it difficult to compare the relative value of different plans. Furthermore, unless a consumer carefully manages and monitors their usage, they may pay for more than they use or exceed their ‘included value’ and be charged excess fees. As a result, the amount they pay per minute or per MB may vary each month. In addition, in 2012, some MNOs increased or maintained advertised call rates and reduced the amount of included calls and included data in retail mobile plans.

Third, many retail mobile services and handsets are purchased under multi-year contracts and are subject to early termination fees. Similarly, some phones in Australia are locked to individual mobile networks and may require a fee to be paid to be unlocked and therefore free to be used with another mobile network. These ‘hidden’ costs may not be foremost in consumers’ minds when comparing the prices and values of retail mobile services. In addition, while termination and unlocking fees may protect service providers from the risk and costs of customer churn, high fees may also restrict the ability of customers to choose alternative service providers.

The *Telecommunications Consumer Protection (TCP) Code* that has been registered with the ACMA aims to improve the quality of information given to consumers to help them make informed purchasing decisions about telecommunications services. This is intended to make it easier for consumers to compare plans and services from different providers.

While these issues are not the focus of this inquiry, they indicate that the value of mobile services to consumers in today’s market is not simply a matter of per minute call rates. Additionally MNOs are increasingly competing for consumers on the basis of factors other than price, such as network quality and performance. Some recent network developments are noted in the next section.

2.5 Network infrastructure changes

Long term evolution (LTE) networks

Another major development since the previous MTAS declaration inquiry has been the rollout of LTE mobile networks by the MNOs. As a more advanced technology, LTE technology (also referred to as 4G in Australia) offers superior data rates and capacity compared to 3G networks. Telstra, Optus and VHA have indicated that rolling out LTE networks will help address the increasing demand for data, and to relieve strain on 3G networks.

Telstra and Optus launched their LTE networks in September 2011 and April 2012 respectively. Telstra's network reportedly covers about 40 per cent of the population,²⁹ and Optus offers 4G services in a number of capital cities and other metropolitan areas.³⁰ VHA has also announced that it will be rolling out its LTE network in 2013, and began trials in early 2013.³¹

Whether the MTAS should extend to services offered on LTE networks is one of the issues under consideration in this inquiry.

Infrastructure sharing

Another development since the 2009 MTAS Declaration Inquiry is the increase in network sharing by MNOs in Australia and internationally. Sharing components of mobile network infrastructure between MNOs allows MNOs to reduce the costs of building and maintaining network infrastructure. Various forms of network sharing have been undertaken in Australia, including by Optus and VHA.³²

While ordinarily network sharing arrangements would not appear to affect the termination of voice calls on a mobile network, it is likely to have an effect on investment decisions. This may be relevant to assessing whether the MTAS declaration will continue to promote the efficient use of, and investment in, infrastructure. As noted earlier, if the MTAS declaration continues, the price of the service will be considered in the MTAS FAD inquiry due before the current MTAS FAD expires in June 2014.

²⁹ Telstra, *Telstra 4G – the network without equal*, <http://www.telstra.com.au/mobile-phones/4g/>, accessed 22 February 2012.

³⁰ Optus offers 4G services in selected areas of Sydney, Newcastle, Melbourne, the Gold Coast, Brisbane, Perth, and Adelaide CBD. See, Optus, *Optus 4G coverage*, <https://www.optus.com.au/network/mobile/4g/coverage>, accessed 22 February 2013.

³¹ Vodafone, *Vodafone's 4G tests have kicked off in Sydney*, <http://blog.vodafone.com.au/blog/vodafone-4g-tests-have-kicked-off-in-sydney/>, accessed 22 February 2013.

³² Optus press release, *Optus accelerates 3G and 4G expansion via extended site sharing arrangement*, 3 May 2012.

3 The MTAS Declaration Inquiry in 2009

As noted earlier, the ACCC last conducted an inquiry into the MTAS declaration in the 2008-2009 period. In that inquiry, the ACCC decided that the existing declaration of the MTAS, which was made in 2004, should be extended for 5 years.³³ This section looks at that decision more closely.

In the 2009 Declaration Inquiry, the ACCC found that:

- each MNO continued to have a monopoly over the provision of services on its network and there were no practical substitutes for termination on a particular operator's network, creating an absolute barrier to entry
- continued declaration would have a positive impact on retail competition
- declaration was in the LTIE as it would:
 - promote competition when coupled with an appropriate pricing principle by aligning prices more closely with the underlying costs than would exist in the absence of declaration, and this in turn would promote greater competition in related markets,³⁴
 - promote the achievement of any-to-any connectivity as it prevented a carrier being refused access to the MTAS, and
 - encourage the economically efficient use and investment in infrastructure because without declaration MNOs would have the ability and incentive to set above cost MTAS prices, and that this was likely to distort consumption decisions and lead to inefficient use and investment in telecommunications infrastructure.³⁵

3.1 Promoting competition

In determining whether competition in telecommunications markets would be promoted if the MTAS declaration were maintained, the ACCC first defined the relevant telecommunications markets and then made an assessment of the effect that the continued declaration of the MTAS would have upon competition in these markets.³⁶

³³ ACCC, *Mobile Terminating Access Service – An ACCC Final Report of reviewing the declaration of the mobile terminating access service*, May 2009 (2009 Declaration Inquiry Final Report).

³⁴ The ACCC released pricing principles and indicative prices for the MTAS in March 2009. Pricing principles no longer apply and current regulated prices for the MTAS are set out in the MTAS FAD 2011.

³⁵ *ibid.*, p. 1.

³⁶ *ibid.*, pp. 13-26.

What were the relevant markets?

The ACCC determined that there was one market in which the MTAS was supplied: a specific market for the supply of MTAS. The market for the MTAS was as a wholesale market separate from retail mobile services. The MTAS was unlikely to be substitutable with other services because each provider of call termination had exclusive control of the access to end-users on its own network.³⁷

The ACCC also identified two *downstream markets* in which declaration of the service may promote competition: the retail mobile services market and the market for calls from fixed networks to mobile networks (the fixed to mobile services).

With regard to the downstream retail mobile services market, the ACCC considered it was likely that continued declaration of the MTAS would promote competition in the national market for the supply of retail mobile services. Mobile services included short message services (SMS), multimedia messaging services (MMS) and other services supplied over 2G, 2.5G and 3G networks. Fixed line services were not considered substitutes due to the lack of mobility.³⁸

In relation to the downstream market for the supply of fixed to mobile services, the ACCC also considered that ongoing declaration of the MTAS would promote competition in the market for the supply of fixed to mobile calls.

The ACCC did not include calls from one fixed network to another fixed network, mobile to mobile calls, VoIP calls, or email messaging in the same market as fixed to mobile calls. This was because it did not consider these services were effective substitutes at that time.³⁹

The effect of declaration on competition in these markets

MTAS market

In the 2009 Declaration Inquiry, the ACCC concluded that the wholesale MTAS market was not effectively competitive. The main reasons for this were that operators still had a monopoly over the provision of MTAS on their networks and there were no practical substitutes for termination on another operator's network.⁴⁰

The ACCC was concerned that MNOs may refuse to terminate calls on their networks from new entrants, and that MNOs were unconstrained by competitive forces when setting the price of termination on their network. Therefore, the ACCC concluded that the continued declaration of the MTAS would:

³⁷ *ibid.*, pp. 15-16.

³⁸ *ibid.*, pp. 16-17.

³⁹ *ibid.*, pp. 8-22.

⁴⁰ *ibid.*, pp. 23-25.

- when coupled with appropriate pricing principles,⁴¹ bring MTAS prices closer to the costs of the MTAS than would exist in the absence of declaration, and
- facilitate access to the MTAS on reasonable terms.⁴²

The ACCC considered that these results would be unlikely to increase competition in the market for the MTAS, but would generate greater competition in related markets.

Downstream retail mobile services market

In 2009, the ACCC concluded that the MTAS declaration contributed to the increased competitiveness of the mobile retail market that had been observed since the previous declaration inquiry in 2004, particularly by reducing retail prices. The ACCC concluded that continued declaration would further contribute to increased competition in this market.⁴³

Downstream fixed to mobile services market

As with retail mobile services, the ACCC concluded that declaration of the MTAS, when coupled with appropriate pricing principles, would be likely to promote competition in the fixed to mobile services market. It concluded that the absence of such declaration would lead to above cost pricing for the MTAS. The ACCC also noted that a declared MTAS for calls from fixed networks to mobile networks would prevent vertically integrated carriers – who operate fixed and mobile networks – from raising the costs of access to their mobile networks incurred by their fixed to mobile rivals. It meant that any provider of fixed to mobile services would be able to access mobile network termination on reasonable terms. Therefore the ACCC found that continued declaration would likely promote competition in the fixed to mobile services market.⁴⁴

3.2 Achieving any-to-any connectivity

The ACCC considered that the continued declaration of the MTAS, when coupled with the appropriate pricing principles, promoted the achievement of any-to-any connectivity as it prevented new entrants and smaller operators from being refused access to the MTAS of other operators.⁴⁵

⁴¹ As noted above, pricing principles no longer apply and are replaced by the MTAS FAD.

⁴² *ibid.*

⁴³ *ibid.*, pp. 25-26.

⁴⁴ *ibid.*

⁴⁵ *ibid.*, p. 28.

3.3 Economically efficient use of, and investment in, infrastructure

Economically efficient use of infrastructure

The ACCC concluded that declaration of the MTAS, coupled with appropriate pricing principles, would encourage the efficient use of infrastructure by bringing MTAS prices closer to their efficient costs. It considered that without regulation mobile operators have the ability and incentive to set the price of access to the MTAS above cost. The ACCC considered that such above cost pricing was likely to lead to an inefficient use of telecommunications infrastructure.⁴⁶

Economically efficient investment in infrastructure

In relation to the efficient investment in infrastructure used to supply the MTAS, the ACCC noted that the MTAS declaration had led to a decline in the MTAS price which was more closely aligned with its underlying costs. The ACCC concluded that these factors had helped encourage MNOs to invest in mobile technology and infrastructure. In addition, investment in mobile infrastructure had been efficient and there had not been over investment prior to the inquiry, and that declaration of the MTAS had not discouraged efficient investment in the past.⁴⁷ As a result, the ACCC concluded that declaration would likely continue to encourage efficient investment in infrastructure and technology used to supply the MTAS and the markets within which fixed to mobile, and mobile to mobile, services are provided.

⁴⁶ *ibid.*, p. 30.

⁴⁷ *ibid.*, p. 34.

4 Issues for the MTAS declaration in 2013

4.1 Should mobile voice termination continue to be declared?

The growth in the number of mobile phone users and the increase in calls from mobile phones at the expense of calls made from fixed line phones may be seen as a sign of a competitive market. It could be argued that the sheer volume of consumers and calls on mobile networks creates a commercial incentive to ensure mobile networks interconnect with each other so that consumers on one network can call users on other networks. It could also be argued that the growth of data consumption, and in particular VoIP and over the top messaging applications, may create viable substitutes to the MTAS. This may raise the question of whether voice termination on a mobile network should continue to be regulated.

As discussed earlier, the ACCC has found that MNOs have monopoly power over access to customers on their network. Today, all telecommunications users expect to be able to call an end-user on any mobile network. The ACCC has traditionally considered that any-to-any connectivity is promoted by a declared MTAS as it will ensure that end-users on one network (mobile or fixed) are not prevented from being able to call end-users on another mobile network.

1. Does each MNO continue to have a monopoly over the termination of voice calls on its network?

In addition, in a market like Australia where MNOs have significantly different market shares, MNOs with a large customer base will have an advantage over MNOs with a smaller customer base. MNOs with larger market shares will be better able to exercise market power and charge high prices for access to their bigger customer base. This is less likely to be the case in a market where MNOs have similar market shares.

With regard to VoIP and messaging as a substitute for the MTAS, mobile VoIP usage remains small compared to the total mobile services in operation, with 616,000 VoIP users out of approximately 24.3 million mobile phone subscribers.⁴⁸ This may suggest VoIP has not reached a level of take-up to be considered a viable substitute for conventional voice calls on a mobile network. The ACCC also recognises that applications like these are only available to consumers with a suitably enabled device, such as a smartphone with an application installed.

2. Are there substitutes for the MTAS in the relevant markets?

Also, as noted earlier, the growth of data consumption on mobile networks has led to greater investments in mobile network infrastructure to handle that consumption. However, the extent that these investments have been to support the growth of mobile voice calls is less clear.

⁴⁸ ACMA, *Communications report 2011-12 series: Report 3 – Smartphone and tablets Take up and use in Australia*, December 2012, pp. 1 and 36.

Furthermore, MNOs overseas are increasingly entering into agreements to share parts of their networks to reduce their capital and maintenance costs. This has also occurred in Australia in relation to 3G infrastructure and it is possible that further sharing may occur.

Since the 2009 inquiry, there has been significant investment in, and growth of LTE networks. This inquiry will consider the impact of investments in LTE networks on the declared MTAS. LTE technology potentially enables voice calls to be carried using internet protocol (IP) transmission technology rather than circuit switched technology. IP transmission is a more efficient transmission technology than circuit switched technology and reduces the per minute cost of carrying information and potentially the cost of terminating voice calls on a mobile network.

The ACCC understands that LTE networks in Australia do not currently carry voice calls using IP technology. Due to coverage, inter-cell handover issues, and other technical issues, voice calls on an LTE network are carried using 2G and 3G circuit switching technology. However, mobile network operators are investing in technology to enable voice over LTE to be provided in the future.

3. How will LTE technology affect the termination of voice calls on a mobile network?

As voice over LTE technology is deployed, the costs of carrying voice calls and terminating voice calls on a mobile network are expected to fall further. As these costs approach zero, a key reason for regulating the MTAS – to facilitate access to the MTAS on reasonable prices – will need to be reconsidered.

The costs of providing the MTAS will be closely examined in the MTAS FAD inquiry, if the MTAS is re-declared.

The ACCC invites submissions on these issues, and the questions below to help its consideration of whether mobile voice termination should continue to be the subject of the MTAS declaration.

4. Are the markets defined in the 2009 Declaration Inquiry still appropriate for the MTAS? What other markets, if any, are appropriate?
5. How has the MTAS declaration impacted competition in each of the specific MTAS market as well as the two downstream markets identified in the 2009 Declaration Inquiry? Are there other developments or changes in these markets that make them more competitive than in 2009?
6. How does the take-up of VoIP affect each of the markets identified in the 2009 Declaration Inquiry?
7. Is the continuing declaration of MTAS necessary to ensure any-to-any connectivity? How would any-to-any connectivity be achieved in the absence of declaration?
8. What has been the level and type of investment in mobile infrastructure since 2009?

9. How does declaration of the MTAS affect investment in 2G, 3G and LTE networks?
10. What network sharing is currently taking place and/or planned? How does the declaration of MTAS promote the efficient use of and investment in infrastructure that is part of a shared network arrangement?
11. What would be the impact on competition in each of the markets identified in the 2009 Declaration Inquiry if the MTAS declaration were revoked or left to expire?
12. Would MTAS prices be above the cost of production or access to the MTAS not be provided on reasonable terms in the absence of declaration?

4.2 Should SMS be declared?

Currently, the MTAS service description only applies to the termination of voice services and does not cover messaging services such as SMS.

The ACCC understands that SMS is provided using spare capacity in the mobile network reserved for voice signalling. In contrast, the ACCC understands that MMS is provided using the non-voice capacity set aside for mobile data communications. This may suggest that providing SMS exhibits the same bottleneck features as providing voice calls on a mobile network because the SMS cannot be delivered without access to the mobile network of the receiver.

13. Does the provision of SMS or MMS have similar bottleneck characteristics to the provision of mobile voice calls? If not, how are they different to the provision of voice calls?

In the 2009 Declaration Inquiry, the ACCC decided not to alter the MTAS service description to include SMS or MMS because these services were exhibiting significant growth, were subject to ongoing commercial agreements and there had been no demonstrable market failure.⁴⁹

⁴⁹ ACCC, *2009 MTAS Declaration Inquiry Final Report*, p. 11.

Since the 2009 Declaration Inquiry, the use of SMS has grown substantially and the ACCC is aware of little evidence that commercial agreements are not working or are leading to market failure. For example, the ACMA reports that in June 2012, 18 per cent of mobile phone users send 50 or more SMS each week.⁵⁰ Telstra reported 12 billion SMS were sent on its networks in 2012, up 21.6 per cent on 2011.⁵¹ This corresponds with an increase of 73 per cent between June 2009 and June 2012,⁵² Similarly, Optus reports that SMS and other data revenue was 51 per cent of average revenue per user (ARPU) in the nine months to 31 December 2012, up 4 per cent from a year earlier.⁵³

14. How are SMS and/or MMS interconnection arrangements, including any charges paid for terminating on a mobile network, currently structured and negotiated?

It also appears that the growth of SMS may be slowing. Analyst reports indicate that the growth in the number of SMS sent per subscriber on the Telstra network has fallen since 2009, after the period of rapid growth between 2005 and 2008.⁵⁴ The declining growth rate may, in part, be due to consumer uptake of over the top messaging applications.

Mobile messaging applications may serve as an effective substitute for SMS. Such applications typically use mobile data services to send and receive messages and include emailing applications on smartphones and over the top messaging applications, such as WhatsApp, Facebook Messenger and Apple's iMessage. However, messaging applications like these are only available to consumers with a suitably enabled device, such as a smartphone with the appropriate application installed.

15. Are data based messaging services, such as over the top messaging applications effective substitute services for SMS or MMS services?

It now appears the SMS market is no longer experiencing the same degree of growth as in the 2009 Declaration Inquiry. However the ACCC is not aware of significant evidence of any market failure in the commercial supply and payment for SMS. The ACCC would welcome submissions on whether SMS should be included in the MTAS service description and therefore subject to declaration.

⁵⁰ ACMA, *Communications report 2011-12 series: Report 3 – Smartphone and tablets Take up and use in Australia*, December 2012, p. 35.

⁵¹ *Telstra Annual Report 2012*, p 20.

⁵² Telstra reported that 6,973 million SMS were sent on its network in the year ending June 2008 (Telstra, *Telstra Annual Report 2008*), and that 12,047 million SMS were sent on its network in the year ending June 2012 (Telstra, *Telstra Annual Report 2012*). That this does not take into account any changes in Telstra's subscriber numbers.

⁵³ SingTel Optus, *Financial Results, Third-quarter 2011-2012*, p 47.

⁵⁴ See, Goldman Sachs, *Telstra Corporation Limited, 1H13 Results Trend Analysis*.

16. How is SMS originated, interconnected and terminated over 2G, 3G and 4G networks? How is MMS sent over these networks?
17. What are the costs of terminating SMS and/or MMS on a mobile network? Are termination charges above the costs of providing termination?
18. Should SMS or MMS services be covered by the MTAS service description?

4.3 Should services on LTE networks be declared?

The MTAS declaration has been varied or replaced to make it technologically neutral and applicable regardless of the underlying network technology used to terminate a voice call on a mobile network.

In 1997, the domestic GSM terminating access service and domestic AMPS terminating access services were deemed declared services. This meant that calls on both GSM and AMPS networks were regulated. In 2001 the ACCC revoked the domestic AMPS terminating service declaration as the AMPS networks were closed.

In 2002, the ACCC varied the GSM service to include termination services supplied on the CDMA mobile networks.⁵⁵ In its Final Report the ACCC noted that GSM and CDMA were the only mobile technologies in use at the time.⁵⁶

In the 2003-2004 MTAS declaration inquiry, the ACCC considered whether to vary the MTAS declaration to include voice termination on 2.5G and 3G networks. The ACCC found that the same bottleneck features of voice termination on GSM and CDMA networks also existed on 2.5 and 3G networks. Furthermore, the termination of voice services on mobile networks was a mature service that should be regulated irrespective of the network type over which it was provided.⁵⁷ As a result, the MTAS service description was varied to be technology neutral, covering voice services provided on 2.5G and 3G networks and not referring to a specific network technology.

As the MTAS service description is currently technology neutral it would likely apply to voice services offered on any type of mobile network.

⁵⁵ See, ACCC, *Variation to make the GSM Service Declarations Technology-Neutral – An ACCC Report examining a proposed variation to make the Domestic GSM Originating and Terminating Access Service technology-neutral with respect to technologies currently in use, March 2002* (GSM Final Report).

⁵⁶ *ibid.*, p. 5.

⁵⁷ ACCC, *Mobile Services Review- Mobile terminating Access Service: Final Decision on whether or not the Commission should extend, vary or revoke its existing declaration of the mobile terminating access service, June 2004* (2004 Final Decision), pp. xvii and 19-28.

As a result, the ACCC is seeking submissions on whether and when it is likely voice services will be provided on LTE networks, whether the current MTAS service description would cover voice services provided on LTE networks, and whether the MTAS service description should cover voice termination on LTE networks.

19. When do providers expect that they will begin offering voice services on LTE networks?
20. What are the arrangements between providers to originate, interconnect and terminate voice calls on an LTE mobile network?
21. How do these arrangements differ, if at all, when voice calls are carried over 2G and 3G networks as well as LTE networks?
22. What are the likely interconnection charging arrangements for terminating voice calls on a LTE network?
23. What impact will LTE technology have on the market for the supply of MTAS?
24. Does the development of LTE networks impact the MTAS declaration in any other way?
25. Should the MTAS declaration be varied to expressly apply to voice calls terminating on an LTE mobile network?

4.4 How does the National Broadband Network affect the MTAS?

Since the 2009 Declaration Inquiry, the roll out of the National Broadband Network (NBN) has begun. The ACCC recognises that Australia's telecommunications infrastructure is increasingly adopting IP based transmission technology, which has implications for the ongoing regulation of voice calls, including the termination of voice calls on a mobile network.

In particular, an implication of the NBN is that voice calls will be carried using IP technology rather than circuits switched technology. This is analogous to the shift from 2G and 3G, both of which carry voice calls using circuit switched technology, to 4G/LTE technology which is expected to carry voice calls using IP technology. It also means more calls from fixed networks (the fixed networks that are connected to the NBN) to mobile networks will be carried using IP.

26. How do voice calls originating on an IP based network, such as the NBN, terminate on a mobile network? How does this differ with 2G, 3G and 4G mobile networks?

The ACCC invites submissions on the implications of this structural change for the fixed to mobile call market, in particular, the impacts of this change in terms of access to the MTAS.

27. What impact will voice calls originating on an IP based network, such as the NBN, and terminating on a mobile network, have on the wholesale MTAS market?

28. What impact will voice calls originating on an IP based network, such as the NBN, and terminating on a mobile network, have on the retail mobile market?
29. What impact will voice calls originating on an IP based network, such as the NBN, have on the fixed to mobile voice market?
30. To what extent does the current MTAS service description cover voice calls originating on an IP based network, such as the NBN, and terminating on a mobile network?
31. Should the current MTAS service description be varied to expressly apply to fixed to mobile calls originating on an IP network, such as the NBN, and terminating on a mobile network?

4.5 How long should an MTAS declaration apply?

Under the Act, a declaration must specify an expiry date. This raises the question of whether the MTAS declaration should continue to apply, be left to expire, or a new declaration made. This will, in part, be due to conclusions about other issues in this inquiry. However, in specifying an expiry date the ACCC must have regard to the principle that an expiry date for a declaration should occur sometime between three and five years after the declaration was made.⁵⁸ The ACCC can specify an expiry date shorter than three years or longer than five years if it considers that circumstances warrant it.⁵⁹

The current MTAS declaration has a term of five years and expires in June 2014. An MTAS declaration made in June 2014 with a three year term would result in a regulated MTAS until June 2017. A five year term would result in a regulated MTAS until June 2019.

The ACCC recognises that a five year term provides a level of regulatory certainty which facilitates investment decisions. However, the ACCC also recognises the rapid pace of change in the contemporary mobile environment and that a shorter term, if the MTAS continues to be declared, may be more appropriate.

The ACCC therefore invites submissions on an appropriate duration for an MTAS declaration in the contemporary mobile environment.

32. What is an appropriate duration for a declared MTAS?

⁵⁸ Paragraph 152ALA(2)(a) of the Act.

⁵⁹ Subsection 152ALA (2) of the Act.

Appendix A – Consolidated list of questions

Should mobile voice termination still be declared?

1. Does each MNO continue to have a monopoly over the termination of voice calls on its network?
2. Are there substitutes for the MTAS in the relevant markets?
3. How will LTE technology affect the termination of voice calls on a mobile network?
4. Are the markets defined in the 2009 Declaration Inquiry still appropriate for the MTAS? What other markets, if any, are appropriate?
5. How has the MTAS declaration impacted competition in each of the specific MTAS market as well as the two downstream markets identified in the 2009 Declaration Inquiry? Are there other developments or changes in these markets that make them more competitive than in 2009?
6. How does the take-up of VoIP affect each of the markets identified in the 2009 Declaration Inquiry?
7. Is the continuing declaration of MTAS necessary to ensure any-to-any connectivity? How would any-to-any connectivity be achieved in the absence of declaration?
8. What has been the level and type of investment in mobile infrastructure since 2009?
9. How does declaration of the MTAS affect investment in 2G, 3G and LTE networks?
10. What network sharing is currently taking place and/or planned? How does the declaration of MTAS promote the efficient use of and investment in infrastructure that is part of a shared network arrangement?
11. What would be the impact on competition in each of the markets identified in the 2009 Declaration Inquiry if the MTAS declaration were revoked or left to expire?
12. Would MTAS prices be above the cost of production or access to the MTAS not be provided on reasonable terms in the absence of declaration?

Should SMS be declared?

13. Should SMS or MMS services be covered by the MTAS service description?
14. Does the provision of SMS or MMS have similar bottleneck characteristics to the provision of mobile voice calls? If not, how are they different to the provision of voice calls?
15. How are SMS and/or MMS interconnection arrangements, including any charges paid for terminating on a mobile network, currently structured and negotiated?
16. Are data based messaging services, such as over the top messaging applications effective substitute services for SMS or MMS services?
17. How is SMS originated, interconnected and terminated over 2G, 3G and 4G networks? How is MMS sent over these networks?
18. What are the costs of terminating SMS and/or MMS on a mobile network? Are termination charges above the costs of providing termination?

Should voice services terminating on LTE networks be declared?

19. When do providers expect that they will begin offering voice services on LTE networks?
20. What are the arrangements between providers to originate, interconnect and terminate voice calls on an LTE mobile network?
21. How do these arrangements differ, if at all, when voice calls are carried over 2G and 3G networks as well as LTE networks?
22. What are the likely interconnection charging arrangements for terminating voice calls on a LTE network?
23. What impact will LTE technology have on the market for the supply of MTAS?
24. Does the development of LTE networks impact the MTAS declaration in any other way?
25. Should the MTAS declaration be varied to expressly apply to voice calls terminating on an LTE mobile network?

How does the NBN affect the MTAS?

26. How do voice calls originating on an IP based network, such as the NBN, terminate on a mobile network? How does this differ with 2G, 3G and 4G mobile networks?
27. What impact will voice calls originating on an IP based network, such as the NBN, and terminating on a mobile network, have on the wholesale MTAS market?
28. What impact will voice calls originating on an IP based network, such as the NBN, and terminating on a mobile network, have on the retail mobile market?
29. What impact will voice calls originating on an IP based network, such as the NBN, have on the fixed to mobile voice market?
30. To what extent does the current MTAS service description cover voice calls originating on an IP based network, such as the NBN, and terminating on a mobile network?
31. Should the current MTAS service description be varied to expressly apply to fixed to mobile calls originating on an IP network, such as the NBN, and terminating on a mobile network?

How long should an MTAS declaration apply?

32. What is an appropriate duration for a declared MTAS?

Appendix B – MTAS Service Description

MTAS Declaration service description - 2009

The domestic mobile terminating access service is an access service for the carriage of voice calls from a point of interconnection, or potential point of interconnection, to a B-Party directly connected to the access provider's digital mobile network.

Definitions

Where words or phrases used in this Declaration are defined in the *Trade Practices Act 1974* or the *Telecommunications Act 1997* or the *Telecommunications Numbering Plan 1997*, they have the meaning given in the relevant Act or instrument.

Other definitions

B-Party is the end-user to whom a telephone call is made.

Digital mobile network is a *telecommunications network* that is used to provide *digital mobile telephony services*.

Point of interconnection is a location which:

- (a) is a physical point of demarcation between the access seeker's network and the access provider's digital mobile network, and
- (b) is associated with (but not necessarily co-located with) one or more gateway exchanges of the access seeker's network and the access provider's digital mobile network.

Appendix C – Legislative framework and the ACCC’s approach to the LTIE

Part XIC of the *Competition and Consumer Act 2010* (Cth) establishes a regime for regulated access to carriage services and services that facilitate the supply of carriage services.

Once a service is declared:

- An access provider supplying the declared service to itself or another person must also supply the service, upon request, to service providers in accordance with the standard access obligations set out in section 152AR.
- The ACCC must commence a public inquiry regarding making an access determination for that service. Access determinations can cover a broad range of terms and conditions but must specify price or a method of ascertaining price.

Subsection 152AL(3) allows the ACCC to declare a specified eligible service if it:

- holds a public inquiry about its proposal to make a declaration
- prepares a report about the inquiry
- publishes that report within a 180 day period ending when the declaration is made, and
- is satisfied that the making of the declaration will promote the LTIE of carriage services or of services provided by means of carriage services.

In particular, the ACCC must decide whether declaring an MTAS will promote the LTIE of carriage services, or of services supplied using carriage services. When determining whether something promotes the LTIE, regard must only be had to the extent to which it achieves the following objectives:

- promoting competition in markets for listed services
- achieving any-to-any connectivity in relation to carriage services that involve communication between end-users
- encouraging the economically efficient use of, and the economically efficient investment in, infrastructure.

The following discussion outlines the LTIE criteria in more detail.

1 Promoting competition

Competition is the process of rivalry between firms, where each market participant is constrained in its price and output decisions by the activity of other market participants. The benefits of competition to end-users are lower prices, better quality and a better range of services over time.

Subsection 152AB(4) of the Act provides that, in determining the extent to which declaration is likely to result in the objective of “promoting competition”, regard must be had (but is not limited) to the extent to which declaration will remove obstacles to end-users gaining access to listed services.

The ACCC considers that denying service providers access to necessary wholesale services on reasonable terms is a significant obstacle to end-users gaining access to services. Declaration can remove such obstacles by facilitating the entry of service providers, thereby providing end-users with additional services to choose from.

Below are some concepts relevant to the consideration of promoting competition in markets for listed services.

Identifying the relevant markets

To assist in determining the impact of the declaration on markets, the ACCC will first need to identify the relevant markets and then assess the likely effect on competition in each market.

Section 4E of the Act provides that the term “market” includes a market for the goods or services under consideration as well as any other goods or services that are substitutable for, or otherwise competitive with, those goods or services. The ACCC’s approach to market definition is discussed in its 2008 Merger Guidelines, is canvassed in its information paper, Anti-competitive conduct in telecommunications markets, August 1999 and is also explored in the ACCC’s second Fixed Services Review position paper, April 2007.

Assessing the impact of the declaration on relevant markets

The next step is to assess the likely effect of the proposed declaration on competition in each relevant market. As noted above, subsection 152AB(4) requires regard to be had to the extent to which a particular thing will remove obstacles to end-users gaining access to listed services.

Market Power

Competition may be inhibited where the structure of the market gives rise to market power. Market power is the ability of a firm or firms to constrain or manipulate the supply of products from the levels and quality that would be observed in a competitive market for a significant period of time.

An access regime such as Part XIC of the Act addresses the structure of a market, limiting or reducing the sources of market power, by allowing third parties to negotiate access to certain services on reasonable terms and conditions. Competition is promoted when market structures are altered such that the exercise of market power becomes more difficult. For example, barriers to entry may have been lowered (permitting more efficient competitors to enter a market and thereby constraining the pricing behaviour of the incumbents) or because the ability of firms to raise rivals’ costs is restricted.

2 Any-to-any connectivity

Subsection 152AB(8) states that the objective of any-to-any connectivity is achieved if, and only if, each end-user who is supplied with a carriage service that involves communication between end-users is able to communicate, by means of that service, with other end-users whether or not they are connected to the same network.

The any-to-any connectivity requirement is particularly relevant when considering services that involve communications between end-users. When considering services which do not require user-to-user connections (such as carriage services that are inputs to an end-to-end service or distribution services, such as the carriage of pay television), this criterion is generally less of an issue.

3 Efficient use of, and investment in, infrastructure

In determining the extent to which declaration is likely to encourage the economically efficient use of, and investment in, infrastructure, subsections 152AB(6) and (7A) of the Act provide that regard is to be had (but is not limited) to the technical feasibility of providing the service, the legitimate commercial interests of the supplier, and the incentives for investment in infrastructure by which services are supplied.

In the ACCC's view, the phrase 'economically efficient use of, and economically efficient investment in, infrastructure' refers to the concept of economic efficiency which has three components:

- Productive efficiency, which refers to the efficient use of resources within each firm to produce goods and services using the least cost combination of inputs.
- Allocative efficiency, which is the efficient allocation of resources across the economy to produce goods and services that are most valued by consumers. It also refers to the distribution of production costs amongst firms within an industry to minimise industry-wide costs.
- Dynamic efficiency, which refers to efficiencies flowing from innovation leading to the development of new services, or improvements in production techniques. It also refers to the efficient deployment of resources between present and future uses, such that the welfare of society is maximised over time.

An access regime may play an important role in ensuring that existing infrastructure is used efficiently where it is inefficient to duplicate the existing networks or network elements. An access regime must also not discourage investment in networks or network elements where such investment is efficient.

Subsection 152AB(6) requires the ACCC to have regard to a number of specific matters in examining whether declaration is likely to lead to achievement of the objective in paragraph 152AB(2)(e). Some of these are outlined below.

Technical feasibility

In assessing the technical feasibility of supplying and charging for a service, the ACCC has considered the:

- technology that is in use, available or likely to become available
- costs involved, and whether it is reasonable or likely to become reasonable
- effects or likely effects on the operation or performance of telecommunications networks.

The ACCC will look to an access provider to assess whether it is technically feasible to supply the relevant service, and will also consider experiences in other jurisdictions.

The legitimate commercial interests of the supplier

The ACCC considers a supplier's legitimate commercial interests are its obligations to the owners of the firm, including the need to recover the cost of providing services and to earn a normal commercial return on the investment in infrastructure. The ACCC considers that allowing for a normal commercial return on investment will provide an appropriate incentive for the access provider to maintain, improve and invest in the efficient provision of the service.

Paragraph 152AB(6)(b) of the Act also requires the ACCC to have regard to whether the access arrangement may affect the owner's ability to realise economies of scale or scope. Economies of scale arise from a production process in which the average (or per unit) cost of production decreases as the firm's output increases. Economies of scope arise from a production process where it is less costly for one firm to produce two (or more) products than it is for two (or more) firms to each separately produce the relevant products.

The ACCC considers declaration is more likely to impact on a supplier's ability to exploit economies of scope than economies of scale. A limit in the capacity available to the owner may constrain the number of services that the owner is able to provide using the infrastructure and thus prevent the realisation of economies of scope associated with the production of multiple services. In contrast, economies of scale may simply result from the use of the capacity of the network and be able to be realised regardless of whether that capacity is being used by the owner or by other carriers or carriage service providers. The ACCC has assessed the effects on the supplier's ability to exploit both economies of scale and scope on a case-by-case basis.

Incentives for investment

Firms should have the incentive to invest efficiently in the infrastructure by which the services are supplied (or are capable, or are likely to become capable, of being supplied).

Access regulation may promote efficient investment in infrastructure. It reduces the barriers to entry for other (competing) businesses as well as reducing the barriers to expansion by competing businesses. The ACCC must also consider the effects of any expected disincentives to invest arising from anticipated increases in competition.